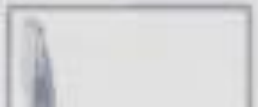
Art2Cam

Automatic bird detection and species determination using an 'artificial ornithologist' camera system – a Bayesian approach

spoor

Next generation biodiversity monitoring that enables industry and nature to coexist

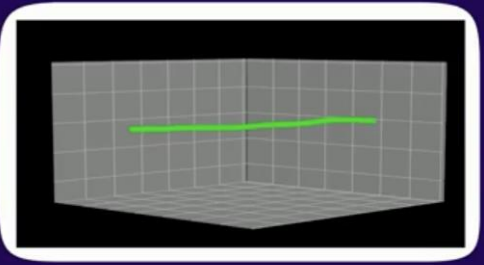


Camera and AI

spoor

ALFA

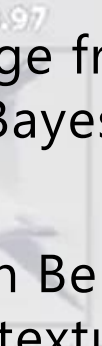
Date:	08/06/2021
Time:	16:19:02
Species:	–
Speed:	26 km/h
Direction:	–
Height:	141 m
Dist. to Zefyros:	1.22 km
Dist. to Tetraspar site:	3.2 km

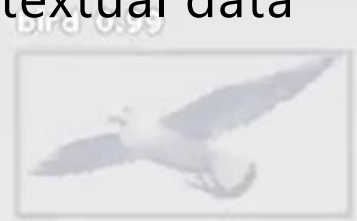


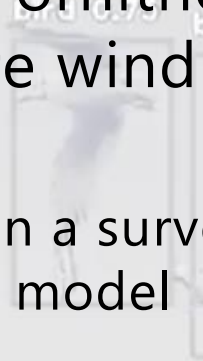
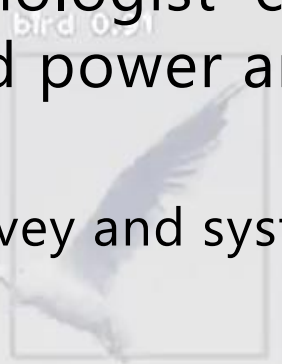
V. 2021.1

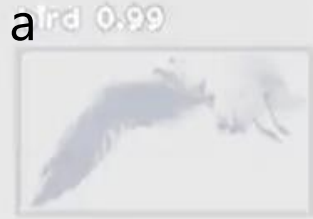
Pilot project Art2Cam

- Gather the knowledge that professional ornithologists possess as a basis for the development of an 'artificial ornithologist' camera system to reduce the conflict between offshore wind power and bird life
  - Gather knowledge from ornithologists in a survey and systematize the answers from the survey in a Bayesian Belief Network model
  - Use the Bayesian Belief Network model to identify different bird species using a camera and contextual data





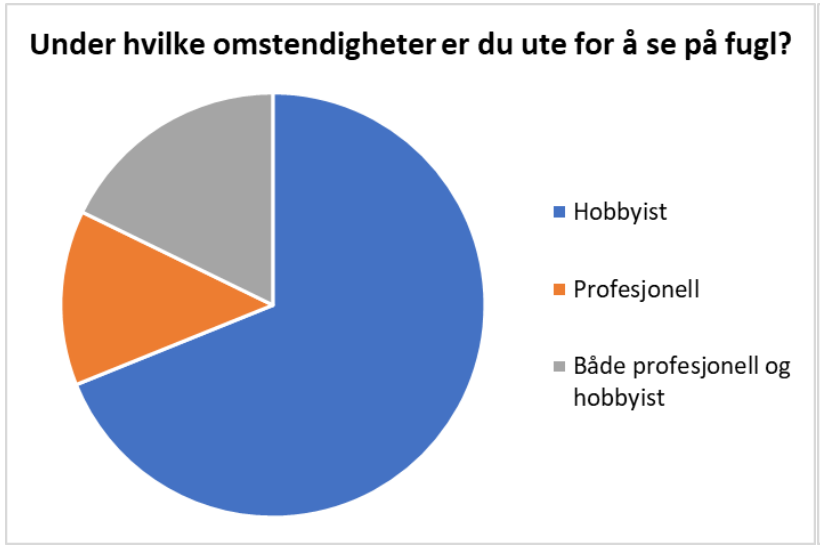



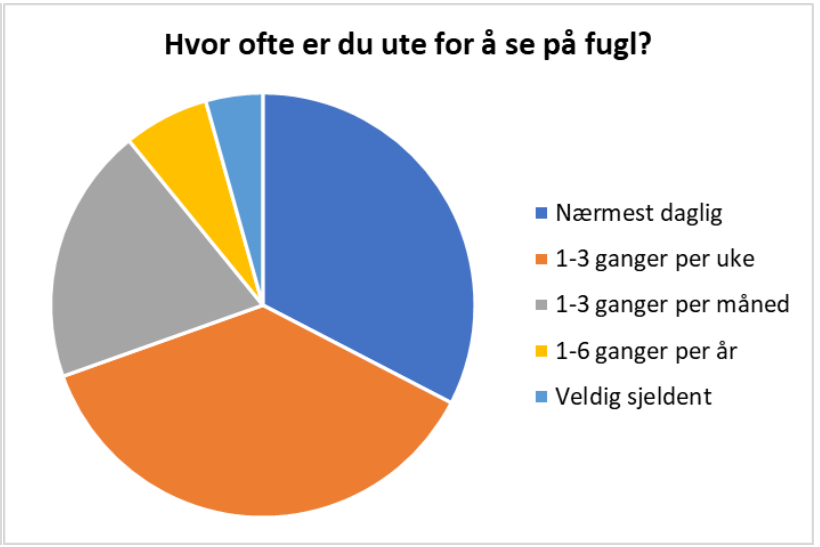


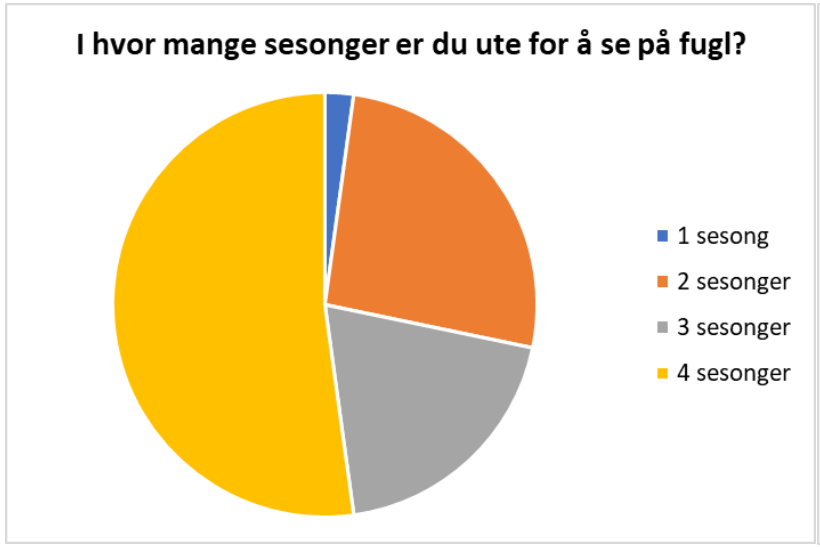
Pilot project Art2Cam

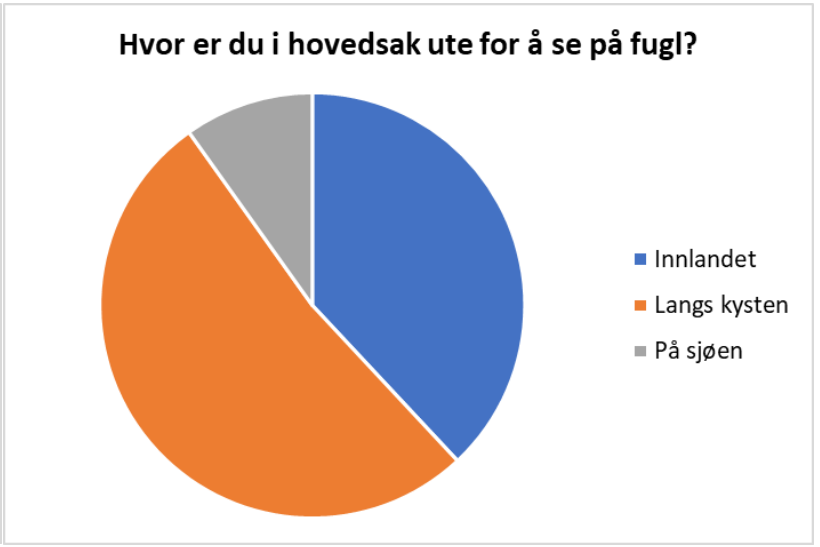
- Workshop with proffessional ornithologists to identify species determination factors
- Questionnaire sent out to ornithologists to survey the relative importance of factors
- Calculate relative importances, and construct a Bayesian Belief Network to assess interdependencies

Hvem var ornitologene?

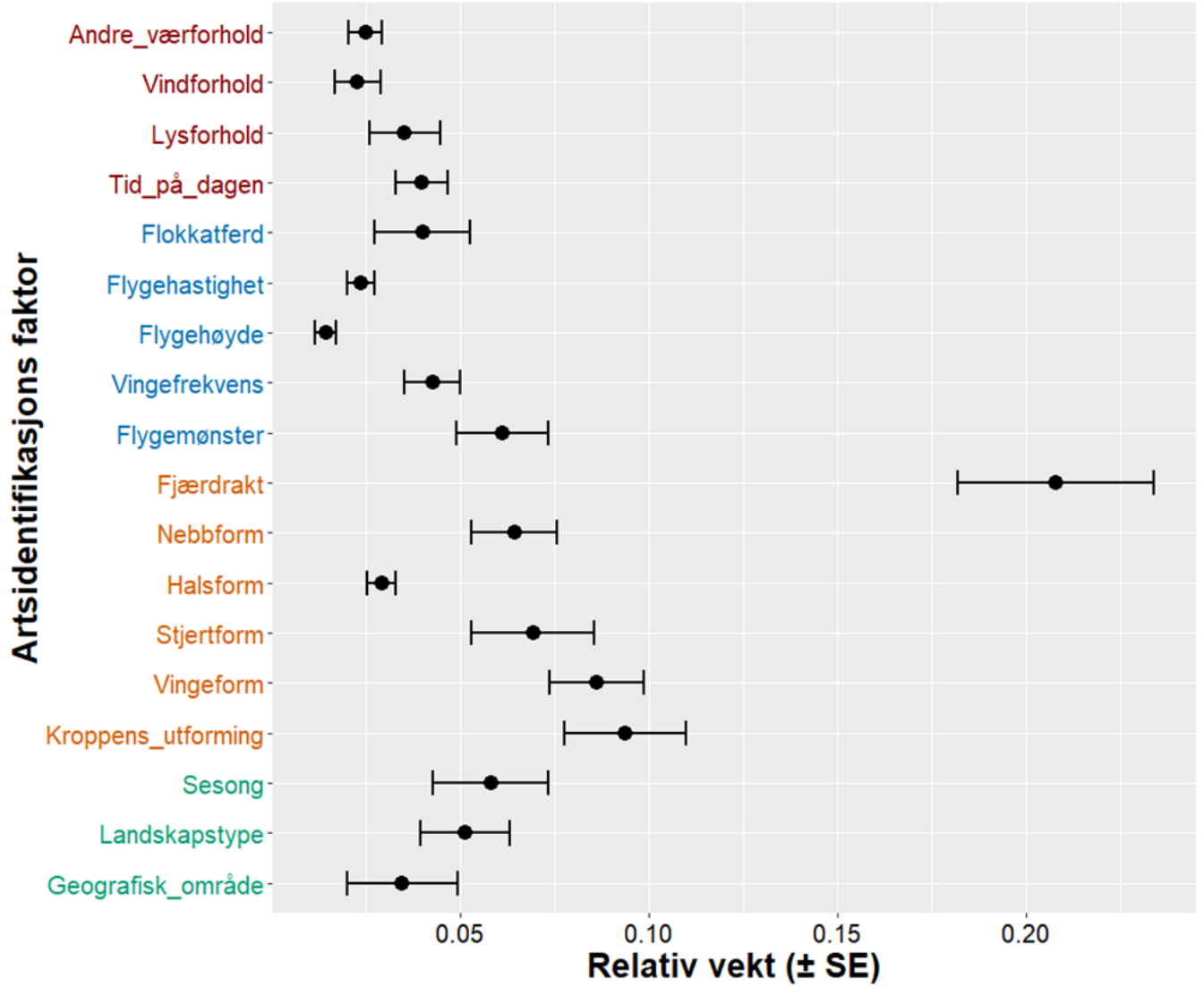




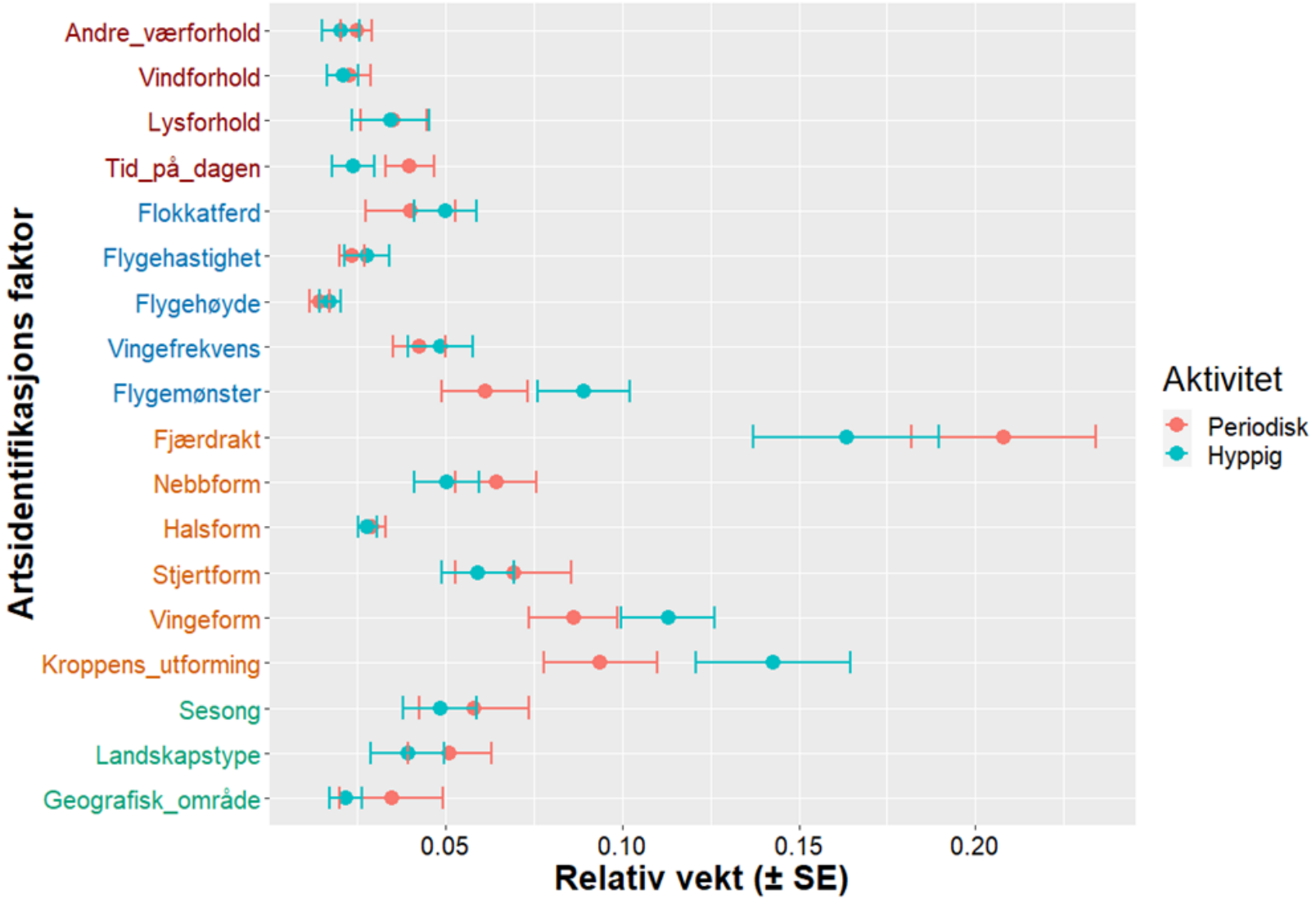




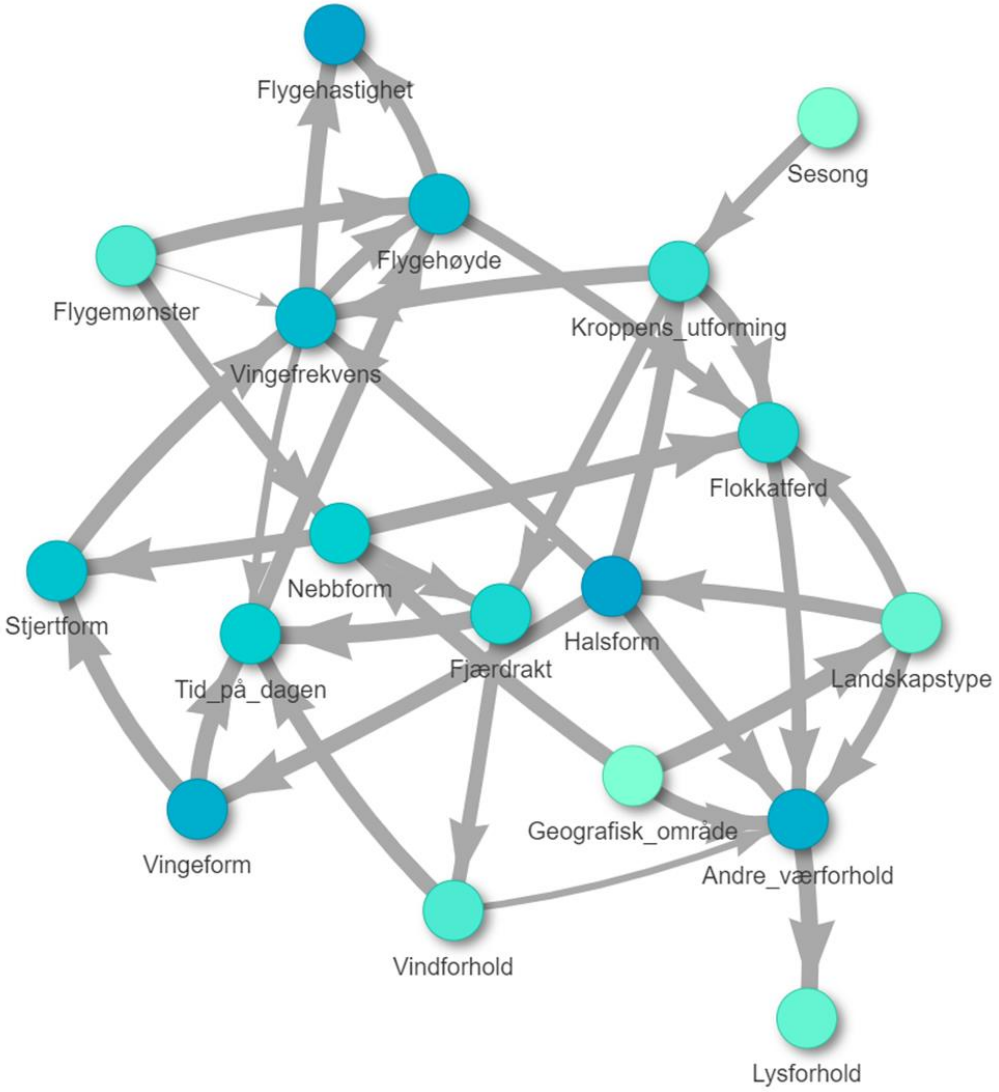
Relative importance of factors



Relative importance of factors



Hvordan henger disse sammen?



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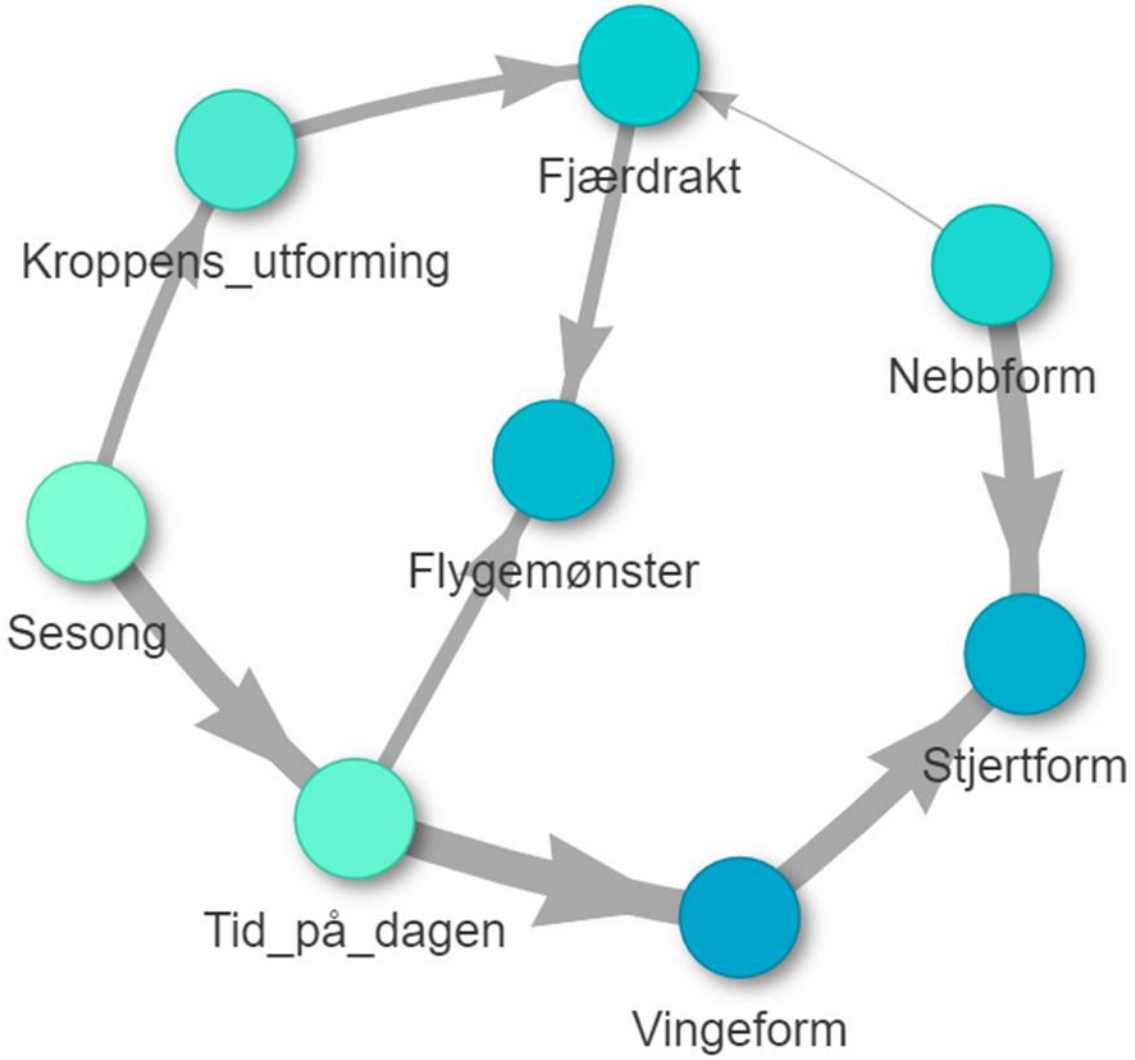

Cooperation and expertise for a sustainable future

Foto. A. Staverløkk